

IN THE CLAIMS

Please amend Claims 1, 6, 10, 15 and 21 and cancel Claims 25-27 as indicated:

1. (currently amended)        A method for co-operative thermal management of a plurality of independent electronic devices housed within a common enclosure, said method comprising:
- designating a priority number for each of said plurality of independent electronic devices, wherein each of said plurality of independent electronic devices has a thermal controller;
- in response to a failure of at least one cooling fan coupled with said common enclosure,
- measuring a temperature of each of said plurality of independent electronic devices; and
- for each of said plurality of independent electronic devices:
- determining if said measured temperature exceeds a threshold value for said independent electronic device;
- in response to a determination that said measured temperature exceeds a threshold value, initializing a count-down value to said designated priority number of said independent electronic device;
- counting down said count-down value as long as said measured temperature exceeds said threshold value; and
- in response to said count-down value reaching a pre-determined action level, powering down said independent electronic device.

2. (original)    The method for co-operative thermal management as recited in Claim 1, wherein said initializing a count-down value further includes initiating an interval timer.

3. (original)    The method for co-operative thermal management as recited in Claim 1, wherein said initializing a count-down value further includes waiting a first predetermined period of time before repeating said measuring a temperature of said independent electronic device in response to a determination that said measured temperature does not exceed said threshold value.

4. (original)    The method for co-operative thermal management as recited in Claim 2, wherein said measuring a temperature further includes:

determining if said count-down value is equal to zero; and

powering-down said independent electronic device in response to a determination that said count-down value is equal to zero, otherwise waiting a second predetermined period of time before obtaining a second temperature measurement of said independent electronic device and determining if said second temperature measurement exceeds said threshold value.

5. (previously presented) The method for co-operative thermal management as recited in Claim 4, wherein said measuring a temperature further includes:

determining if said interval timer has expired in response to a determination that said second temperature measurement exceeds said threshold value; and

decrementing said count-down value, and subsequently reinitiating said interval timer and repeating said determining if said count-down value is equal to zero in response to a determination that said interval timer has expired, otherwise repeat waiting a second predetermined period of time before obtaining a temperature measurement.

6. (currently amended) A method for co-operative thermal management of a plurality of independent electronic devices housed within a common enclosure, said method comprising:

designating a priority number for each of said plurality of independent electronic devices, wherein each of said plurality of independent electronic devices has a service processor that remains operational when said electronic device is powered down; and

in response to a failure of at least one cooling fan coupled with said common enclosure, measuring a temperature of each of said plurality of independent electronic devices, and for each of said plurality of independent electronic devices:

determining if said measured temperature exceeds a threshold value for said independent electronic device;

in response to a determination that said measured temperature exceeds a threshold value, initializing a count-down value to said designated priority number of said independent electronic device;

counting down said count-down value as long as said measured temperature exceeds said threshold value; and

in response to said count-down value reaching a pre-determined action level, powering down said independent electronic device.

7. (original) The method for co-operative thermal management as recited in Claim 6, wherein said initializing a count-down value further includes initiating an interval timer.

8. (original) The method for co-operative thermal management as recited in Claim 7, wherein said measuring a temperature further includes:

determining if said count-down value is equal to zero; and

powering-up said independent electronic device in response to a determination that said count-down value is equal to zero, otherwise waiting a second predetermined period of time before obtaining a second temperature measurement of said independent electronic device and determining if said second temperature measurement exceeds said threshold value.

9. (previously presented) The method for co-operative thermal management as recited in Claim 8, further comprising:

determining if said interval timer has expired in response to a determination that said second temperature measurement does not exceed said threshold value; and

decrementing said count-down value, and subsequently reinitiating said interval timer and repeating said determining if said count-down value is equal to zero in response to a determination that said interval timer has expired, otherwise repeat waiting a second predetermined period of time before obtaining a temperature measurement.

10. (currently amended) An electronic device, comprising:

a designated priority number; and

a thermal controller, including:

means for, in response to a failure of at least one cooling fan coupled with said electronic device, measuring a temperature of said electronic device;

means for determining if said measured temperature exceeds a threshold value for said electronic device;

means for, responsive to a determination that said measured temperature exceeds a threshold value, initializing a count-down value to said designated priority number of said electronic device;

means for counting down said count-down value as long as said measured temperature exceeds said threshold value; and

means for, responsive to said count-down value reaching a pre-determined action level, powering down said electronic device.

11. (original) The electronic device as recited in Claim 10, wherein said thermal controller is embodied in a service processor that remains operational when said electronic device is powered down.

12. (original) The electronic device as recited in Claim 10, wherein said thermal controller powers down said electronic device in response to a determination that said measured temperature exceeds said threshold value and said count-down value is equal to zero.

13. (original) The electronic device as recited in Claim 11, wherein said service processor powers up said electronic device in response to a determination that said measured temperature does not exceed said threshold value and said count-down value is equal to zero.

14. (original) The electronic device as recited in Claim 11, wherein said electronic device is a server blade.

15. (currently amended) A data processing system, comprising:

an enclosure; and

a plurality of independent electronic devices housed within said enclosure, wherein each of said plurality of independent electronic devices having:

a designated priority; and

a thermal controller, including:

means for, in response to a failure of at least one cooling fan coupled with said enclosure, measuring a temperature of said independent electronic device;

means for determining if said measured temperature exceeds a threshold value for said independent electronic device;

means for, responsive to a determination that said measured temperature exceeds a threshold value, initializing a count-down value to said designated priority number of said independent electronic device;

means for counting down said count-down value as long as said measured temperature exceeds said threshold value; and

means for, responsive to said count-down value reaching a pre-determined action level, powering down said electronic device.

16. (original) The data processing system as recited in Claim 15, further comprising:

a backplane coupled to said plurality independent electronic devices; and a plurality of fans.

17. (original) The data processing system as recited in Claim 15, wherein said thermal controller is embodied in a service processor that remains operational when said independent electronic device is powered down.

18. (original) The data processing system as recited in Claim 15, wherein said thermal controller powers down said independent electronic device in response to a determination that said measured temperature exceeds said threshold value and said count-down value is equal to zero.

19. (original) The data processing as recited in Claim 17, wherein said service processor powers up said independent electronic device in response to a determination that said measured temperature does not exceed said threshold value and said count-down value is equal to zero.

20. (original) The data processing system as recited in Claim 15, wherein said independent electronic device is a server blade.

21. (currently amended) A computer-readable medium having stored thereon computer executable instructions for implementing a method for co-operative thermal management of a plurality of independent electronic devices housed within a common enclosure, said computer

executable instructions when executed by one of said plurality of independent electronic devices perform the steps of:

designating a priority number for said independent electronic device,

in response to a failure of at least one cooling fan coupled with said common enclosure,

measuring a temperature of said independent electronic device;

determining if said measured temperature exceeds a threshold value for said independent electronic device;

in response to a determination that said measured temperature exceeds a threshold value, initializing a count-down value to said designated priority number of said independent electronic device and initiate an interval timer;

counting down said count-down value as long as said measured temperature exceeds said threshold value; and

in response to said count-down value reaching a pre-determined action level, powering down said independent electronic device.

22-27. (cancelled)